## **CLAIMS**

What is claimed is:

- 1. A composition of matter comprising a peptide consisting of at least the first five amino acids from the N-terminal of SEQ. ID. NO.: 2 and no more than 25 amino acids total.
- 2. A composition of matter as in claim 1 wherein the peptide contains no more than 15 amino acids total.
- 3. A composition of matter as in claim 2 wherein the peptide is as in SEQ. ID. NO.: 3.
- 4. A composition of matter as in claim 1 wherein the peptide produces an antibody which has a binding affinity to NGFs from human body fluids and human origin eukaryotic cells which is higher than a binding affinity exhibited by an antibody produced in immunological response to an NGF derived from venom.
- 5. A method of using a composition of matter as in claim 1 comprising administering the composition of claim 1 to a patient in need of a nerve growth factor in a manner to reach the bloodstream of the patient, wherein the peptide is capable of crossing the blood-brain barrier.
- 6. A method of use as in claim 5 wherein the patient is a victim of a neurodegenerative disease selected from the group consisting of Alzheimer's disease and Parkinson's disease and the administration technique is selected from the group consisting of nasal insufflation, buccal administration, oral ingestion, and intramuscular injection.
- 7. A method of using a composition of matter as in claim 1 comprising

forming antibodies against the peptide, and contacting, in vitro, a human nerve growth factor with the antibodies so as to cause the antibodies to react immunologically with the human nerve growth factor.

8. A method for administering a nerve growth factor to a patient in need of such treatment, said method comprising

selecting a nerve growth factor having in the range of 5 to 20 amino acids, and capable of crossing the blood-brain barrier, and

administering said nerve growth factor to said patient in a manner to reach the bloodstream of the patient.

- 9. A method as in claim 8 wherein the patient is a victim of a neurodegenerative disease selected from the group consisting of Alzheimer's disease and Parkinson's disease and the administration technique is selected from the group consisting of nasal insufflation, buccal administration, oral ingestion, and intramuscular injection.
- 10. A method as in claim 8 wherein the nerve growth factor comprises a peptide consisting of at least the first five amino acids from the N-terminal of SEQ. ID. NO.: 2 and no more than 25 amino acids total.
- 11. A process comprising contacting, in vitro, a human nerve growth factor with an antibody made against a peptide containing at least five amino acids from the N-terminal SEQ. ID. NO.: 2 and no more than 25 amino acids total.
- 12. A process as in claim 8 wherein the contacting is carried out so as to cause the antibody to react immunologically with the human nerve growth factor.